



Rack Management Controller

User Manual

Version 1.1

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Revision History

No.	Author	Version	Date	Changes
1	Beth	1.0	11/19/2014	First release
2	Beth	1.1	11/26/2014	Added Preface
3				

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Preface

Wiwynn Rack Management Controller (RMC) is an efficient rack monitoring and management tool. Use Wiwynn RMC to monitor the system health status, rack-level power consumption and many more.

About this Manual

This manual contains information about the Wiwynn RMC features, how to access RMC and use its functions.

The contents in this manual include:

Chapter 1 – RMC overview and features

Chapter 2 – useful information on how to access RMC

Chapters 3 to 6 – detailed description of the four major RMC functions:
Dashboard, PSU Status, Configuration and Firmware Update.

1. Overview

Through the embedded Wiwynn RMC, data center administrators can remotely monitor rack-level power utilization and PSUs health. They can also turn individual PSU on/off and change the power policy of a whole rack from a remote location. In case of critical events, RMC can notify administrators via multiple channels. Furthermore, RMC can intelligently control and excise the PSUs in its power shelf to keep power conversion efficiency in an **optimized level**.

The signature OCP rack power shelf is a centralized power unit that distributes power to all IT devices in a rack through bus bars. Power shelf has better power efficiency while reducing PSU redundancy cost power supply consolidation.

The following picture shows the Wiwynn RMC embedded in a power shelf.



1.1 Key Features

- Dashboard
- Detailed sensor reading
- Statistics and histogram
- System Event Log
- Configuration

2. Accessing RMC

2.1 Login

RMC acquires a dynamic IP with DHCP by default and you can look up its IP address via the MAC address listed in your DHCP server.

After keying in the RMC's IP address in a web browser, you will see the following page:

A login form with a light blue background. It contains two input fields: 'Username:' and 'Password:'. Below the password field is a blue link that says 'Forgot Password?'. At the bottom of the form is a button labeled 'Login'.

Required Browser Settings

1. Allow popups from this site ✓
2. Allow file download from this site. (How to )
3. Enable javascript for this site ✓
4. Enable cookies for this site ✓

Key in **[admin]** for both Username and Password, then click on **Login**.

Note:

Please consult the system provider for the correct username and password.

The PSU monitoring interface has four major pages - Dashboard, PSU Status, Configuration and Firmware Update, as explained in the following chapters.

3. Dashboard

To open this page, click on **Dashboard** on the main menu. Dashboard page contains **Firmware information** and **Sensor Monitoring**. The **On/Off** button is for controlling the PSU status.

Download daily statistics

Dashboard PSU Status Configuration Firmware Update

Dashboard

Firmware Revision: 1.5.94 Firmware Build Time: Mar 7 2014 06:46:20 CST

Download Now SENSORS STATISTICS

Sensor Monitoring

PSU1 PSU2 PSU3 PSU4 PSU5 PSU6

On Off On Off On Off On Off On Off On Off

Sensor	Reading	Status
System	On	●
PSU1_Status	On	●
PSU2_Status	On	●
PSU3_Status	On	●
PSU4_Status	On	●
PSU5_Status	On	●
PSU6_Status	On	●

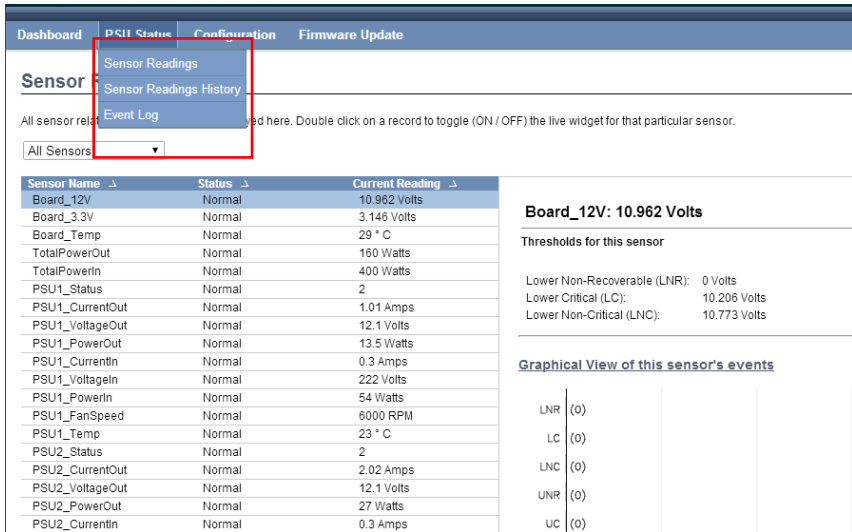
Sensor readings in tree structure

PSU status and Power on/off a PSU

4. PSU Status

PSU stands for Power Supply Unit. **PSU Status** allows you to view the Sensor Readings, Sensor Readings History and Event Log.

To open this page, click on **PSU Status** on the main menu.



Dashboard PSU Status Configuration Firmware Update

Sensor

Sensor Readings
Sensor Readings History
Event Log

All sensor readings are displayed here. Double click on a record to toggle (ON / OFF) the live widget for that particular sensor.

All Sensors

Sensor Name	Status	Current Reading
Board_12V	Normal	10.962 Volts
Board_3.3V	Normal	3.146 Volts
Board_Temp	Normal	29 ° C
TotalPowerOut	Normal	160 Watts
TotalPowerIn	Normal	400 Watts
PSU1_Status	Normal	2
PSU1_CurrentOut	Normal	1.01 Amps
PSU1_VoltageOut	Normal	12.1 Volts
PSU1_PowerOut	Normal	13.5 Watts
PSU1_CurrentIn	Normal	0.3 Amps
PSU1_VoltageIn	Normal	222 Volts
PSU1_PowerIn	Normal	54 Watts
PSU1_FanSpeed	Normal	6000 RPM
PSU1_Temp	Normal	23 ° C
PSU2_Status	Normal	2
PSU2_CurrentOut	Normal	2.02 Amps
PSU2_VoltageOut	Normal	12.1 Volts
PSU2_PowerOut	Normal	27 Watts
PSU2_CurrentIn	Normal	0.3 Amps

Board_12V: 10.962 Volts

Thresholds for this sensor

Lower Non-Recoverable (LNR): 0 Volts
Lower Critical (LC): 10.206 Volts
Lower Non-Critical (LNC): 10.773 Volts

Graphical View of this sensor's events

Event Type	Count
LNR	(0)
LC	(0)
LNC	(0)
UNR	(0)
UC	(0)

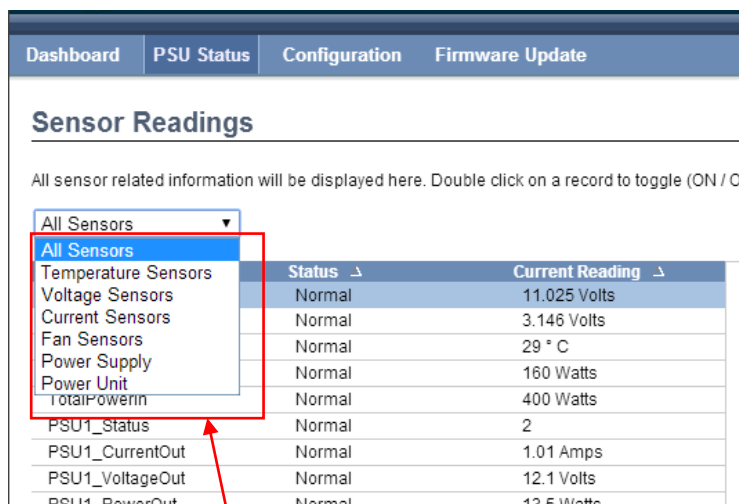
5.1 Sensor Readings

To open this page, click on **PSU Status** → **Sensor Readings**.

Sensor Readings page displays all sensor related information as follows:

Sensor Type

This drop-down menu allows you to select the type of sensor. The list of sensors with the Sensor Name, Status and Current Reading will be displayed. Select **All Sensors** to display all the available sensor details or select a sensor type that you want to display in the list.



The screenshot shows the 'Sensor Readings' page with a navigation bar containing 'Dashboard', 'PSU Status', 'Configuration', and 'Firmware Update'. Below the navigation bar is the 'Sensor Readings' title and a description: 'All sensor related information will be displayed here. Double click on a record to toggle (ON / OFF)'. A dropdown menu is open, showing the following options: 'All Sensors', 'Temperature Sensors', 'Voltage Sensors', 'Current Sensors', 'Fan Sensors', 'Power Supply', 'Power Unit', and 'TotalPowerIn'. A red box highlights the dropdown menu, and a red arrow points to the 'All Sensors' option. Below the dropdown menu is a table with three columns: 'Sensor Name', 'Status', and 'Current Reading'. The table contains the following data:

Sensor Name	Status	Current Reading
PSU1_Status	Normal	2
PSU1_CurrentOut	Normal	1.01 Amps
PSU1_VoltageOut	Normal	12.1 Volts
PSU1_PowerOut	Normal	12.5 Watts

Sensors options:

All Sensors
Temperature Sensors
Voltage Sensors
Current Sensors
Fan Sensors
Power Supply
Power Unit

Live Widget

Double-click on a specific sensor (such as RMC Temp) or click on **ON** (on the upper right) to open a **Live Widget** window.

Dashboard | PSU Status | Configuration | Firmware Update | Help

Sensor Readings

All sensor related information will be displayed here. Double click on a record to toggle (ON / OFF) the live widget for that particular sensor.

All Sensors Sensor Count: 59 sensors

Sensor Name	Status	Current Reading
RMC_12V	Normal	11.025 Volts
RMC_3.3V	Normal	3.177 Volts
RMC_Temp	Normal	29 ° C
POUT_SUM	Normal	160 Watts
PIN_SUM	Normal	240 Watts
PSU1_Status	Normal	2
PSU1_IOUT	Normal	0 Amps
PSU1_VOUT	Normal	12.1 Volts
PSU1_POUT	Normal	0 Watts
PSU1_IIN	Normal	0.2 Amps
PSU1_VIN	Normal	224.4 Volts
PSU1_PIN	Normal	27 Watts
PSU1_Fan	Normal	6200 RPM
PSU1_TEMP	Normal	23 ° C
PSU2_Status	Normal	2
PSU2_IOUT	Normal	1.01 Amps
PSU2_VOUT	Normal	12.1 Volts
PSU2_POUT	Normal	13.5 Watts

RMC_Temp: 29 ° C NORMAL

Live Widget **ON**

Thresholds for this sensor

Lower Non-Recoverable (LNR): 0 ° C

Upper Non-Recoverable (UNR): 0 ° C

Lower Critical (LC): 5 ° C

Upper Critical (UC): 60 ° C

Lower Non-Critical (LNC): 7 ° C

Upper Non-Critical (UNC): 58 ° C

Graphical View of this sensor's events

Event	Time	Value
LNR	(0)	
LC	(0)	
LNC	(0)	
UNR	(0)	

The Live Widget window appears on the lower left of the screen. Click on **OFF** (on the upper right) to close the Live Widget window.

Dashboard | PSU Status | Configuration | Firmware Update | Help

Sensor Readings

All sensor related information will be displayed here. Double click on a record to toggle (ON / OFF) the live widget for that particular sensor.

All Sensors Sensor Count: 59 sensors

Sensor Name	Status	Current Reading
Board_12V	Normal	11.025 Volts
Board_3.3V	Normal	3.177 Volts
Board_Temp	Normal	29 ° C
TotalPowerOut	Normal	160 Watts
TotalPowerIn	Normal	240 Watts
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PSU1_IOUT	Normal	0 Amps
PSU1_VOUT	Normal	12.1 Volts
PSU1_POUT	Normal	0 Watts
PSU1_IIN	Normal	0.2 Amps
PSU1_VIN	Normal	224.4 Volts
PSU1_PIN	Normal	27 Watts
PSU1_Fan	Normal	6200 RPM
PSU1_TEMP	Normal	23 ° C
PSU2_Status	Normal	2
PSU2_IOUT	Normal	1.01 Amps
PSU2_VOUT	Normal	12.1 Volts
PSU2_POUT	Normal	13.5 Watts

Board_Temp: 29 ° C NORMAL

Live Widget **OFF**

Thresholds for this sensor

Lower Non-Recoverable (LNR): 0 ° C

Upper Non-Recoverable (UNR): 0 ° C

Lower Critical (LC): 5 ° C

Upper Critical (UC): 60 ° C

Lower Non-Critical (LNC): 7 ° C

Upper Non-Critical (UNC): 58 ° C

Graphical View of this sensor's events

Event	Time	Value
LNR	(0)	
LC	(0)	
LNC	(0)	
UNR	(0)	

Board_Temp

Live Reading: 29 ° C

29

23.2

17.4

11.6

5.8

0

Time Elapsed (mins)

5 4 3 2 1 0

Live Widget window

5.2 Sensor Readings History

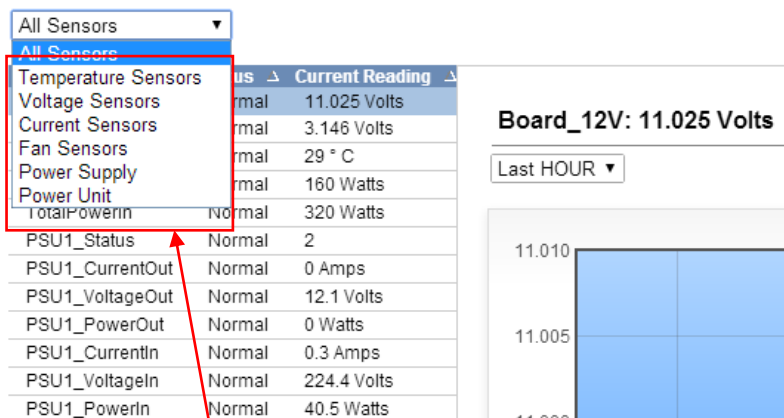
To open this page, click on **PSU Status** → **Sensor Readings History**.

This area displays all sensor related historical information graphically.



Sensor Readings History

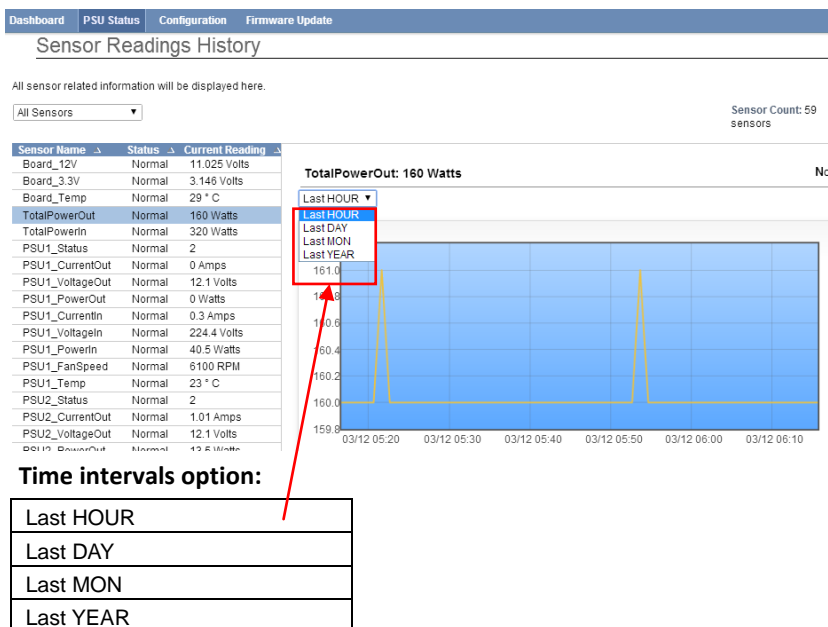
All sensor related information will be displayed here.



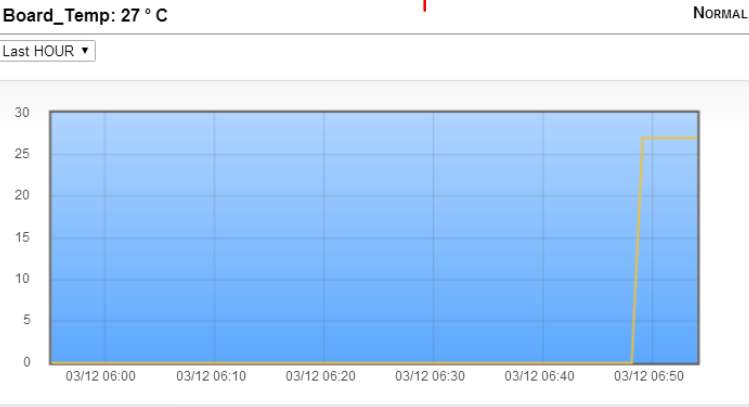
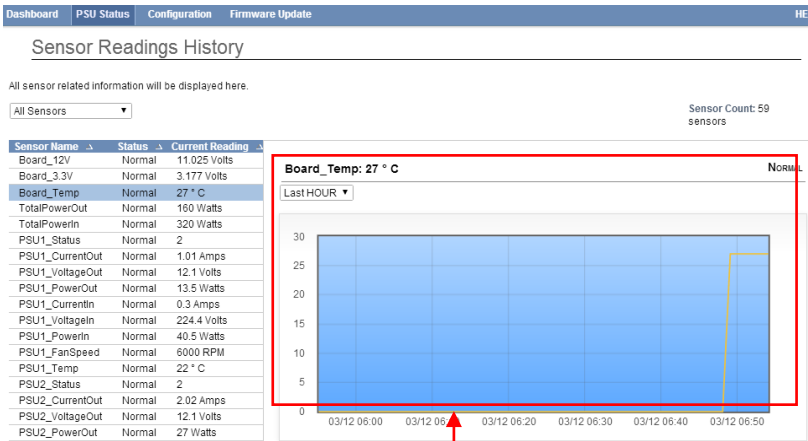
Sensors options:

All Sensors
Temperature Sensors
Voltage Sensors
Current Sensors
Fan Sensors
Power Supply
Power Unit

You can set to filter items using different time intervals.



The chart represents the graphical historical sensor information.



You can use different sensor items to view specific events or sort the list of entries by clicking on any column header.

Dashboard

PSU Status

Configuration

Firmware Update

Event Log

Events generated by the system will be logged here. Double-click on a record to see the description.

All Events

filter by:

All Sensors

All Sensors

Board_12V

Board_3.3V

Board_Temp

TotalPowerOut

TotalPowerIn

PSU1_Status

PSU1_CurrentOut

PSU1_VoltageOut

PSU1_PowerOut

PSU1_CurrentIn

PSU1_VoltageIn

PSU1_PowerIn

PSU1_FanSpeed

PSU1_Temp

PSU2_Status

PSU2_CurrentOut

PSU2_VoltageOut

PSU2_PowerOut

PSU2_CurrentIn

Event ID	Time Stamp	Sensor Name	Type
24	03/12/2014 07:08:55	PSU1_VoltageOut	age
23	03/12/2014 07:08:55	PSU1_VoltageOut	age
22	03/12/2014 07:08:50	PSU1_VoltageOut	age
21	03/12/2014 07:08:49	PSU1_VoltageOut	age
20	03/12/2014 07:08:38	PSU2_VoltageOut	age
19	03/12/2014 07:08:38	PSU2_VoltageOut	age
18	03/12/2014 07:08:17	PSU2_VoltageOut	age
17	03/12/2014 07:08:16	PSU2_VoltageOut	age
16	03/12/2014 07:08:07	PSU3_VoltageOut	age
15	03/12/2014 07:08:06	PSU3_VoltageOut	age
14	03/12/2014 07:07:42	PSU3_VoltageOut	age
13	03/12/2014 07:07:41	PSU3_VoltageOut	age
12	03/12/2014 07:07:34	PSU4_VoltageOut	age
11	03/12/2014 07:07:34	PSU4_VoltageOut	age

Filter items:

All Sensors	PSU2_Status	PSU3_PowerIn	PSU5_PowerOut
Board_12V	PSU2_CurrentOut	PSU3_FanSpeed	PSU5_CurrentIn
Board_3.3V	PSU2_VoltageOut	PSU3_Temp	PSU5_VoltageIn
Board_Temp	PSU2_PowerOut	PSU4_Status	PSU5_PowerIn
TotalPowerOut	PSU2_CurrentIn	PSU4_CurrentOut	PSU5_FanSpeed
TotalPowerIn	PSU2_VoltageIn	PSU4_VoltageOut	PSU5_Temp
PSU1_Status	PSU2_PowerIn	PSU4_PowerOut	PSU6_Status
PSU1_CurrentOut	PSU2_FanSpeed	PSU4_CurrentIn	PSU6_CurrentOut
PSU1_VoltageOut	PSU2_Temp	PSU4_VoltageIn	PSU6_VoltageOut
PSU1_PowerOut	PSU3_Status	PSU4_PowerIn	PSU6_PowerOut
PSU1_CurrentIn	PSU3_CurrentOut	PSU4_FanSpeed	PSU6_CurrentIn
PSU1_VoltageIn	PSU3_VoltageOut	PSU4_Temp	PSU6_VoltageIn
PSU1_PowerIn	PSU3_PowerOut	PSU5_Status	PSU6_PowerIn
PSU1_FanSpeed	PSU3_CurrentIn	PSU5_CurrentOut	PSU6_FanSpeed
PSU1_Temp	PSU3_VoltageIn	PSU5_VoltageOut	PSU6_Temp

The display list may consist of several pages. You may click on the backward or forward button to check the rest of the pages. Click on **Clear All Event Logs** to clear all the logs. Click on **Save Event Logs** to download the SEL information and the system will output a file named SELLog.

Dashboard
PSU Status
Configuration
Firmware Update
HELP

Event Log

Events generated by the system will be logged here. Double-click on a record to see the description.

All Events
filter by: All Sensors

BMC Timezone
Client Timezone
UTC Offset: (GMT+/-0)

Event ID	Time Stamp	Sensor Name	Sensor Type	Description
24	03/12/2014 07:08:55	PSU1_VoltageOut	Voltage	Lower Non-Critical - Going Low - Deasserted
23	03/12/2014 07:08:55	PSU1_VoltageOut	Voltage	Lower Critical - Going Low - Deasserted
22	03/12/2014 07:08:50	PSU1_VoltageOut	Voltage	Lower Critical - Going Low - Asserted
21	03/12/2014 07:08:49	PSU1_VoltageOut	Voltage	Lower Non-Critical - Going Low - Asserted
20	03/12/2014 07:08:38	PSU2_VoltageOut	Voltage	Lower Non-Critical - Going Low - Deasserted
19	03/12/2014 07:08:38	PSU2_VoltageOut	Voltage	Lower Critical - Going Low - Deasserted
18	03/12/2014 07:08:17	PSU2_VoltageOut	Voltage	Lower Critical - Going Low - Asserted
17	03/12/2014 07:08:16	PSU2_VoltageOut	Voltage	Lower Non-Critical - Going Low - Asserted
16	03/12/2014 07:08:07	PSU3_VoltageOut	Voltage	Lower Non-Critical - Going Low - Deasserted
15	03/12/2014 07:08:06	PSU3_VoltageOut	Voltage	Lower Critical - Going Low - Deasserted
14	03/12/2014 07:07:42	PSU3_VoltageOut	Voltage	Lower Critical - Going Low - Asserted
13	03/12/2014 07:07:41	PSU3_VoltageOut	Voltage	Lower Non-Critical - Going Low - Asserted
12	03/12/2014 07:07:34	PSU4_VoltageOut	Voltage	Lower Non-Critical - Going Low - Deasserted

Event Log: 24 event entries, 1 page(s)
<< < 1 > >>

Save Event Logs
Clear All Event Logs

Event Log: 24 event entries, 1 page(s)
<< < 1 > >>

description
Lower Non-Critical - Going Low - Deasserted
Lower Critical - Going Low - Deasserted
Lower Critical - Going Low - Asserted
Lower Non-Critical - Going Low - Asserted
Lower Non-Critical - Going Low - Deasserted
Lower Critical - Going Low - Deasserted
Lower Critical - Going Low - Asserted
Lower Non-Critical - Going Low - Asserted
Lower Non-Critical - Going Low - Deasserted
Lower Critical - Going Low - Deasserted
Lower Critical - Going Low - Asserted
Lower Non-Critical - Going Low - Asserted
Lower Non-Critical - Going Low - Deasserted
Lower Critical - Going Low - Deasserted
Lower Critical - Going Low - Asserted

Save Event Logs
Clear All Event Logs

Click on **Save Event Logs** to produce a file named SELLog with a SEL message.

Event Log: 24 event entries, 1 page(s)

scription
Lower Non-Critical - Going Low - Deasserted
Lower Critical - Going Low - Deasserted
Lower Critical - Going Low - Asserted
Lower Non-Critical - Going Low - Asserted
Lower Non-Critical - Going Low - Deasserted
Lower Critical - Going Low - Deasserted
Lower Critical - Going Low - Asserted
Lower Non-Critical - Going Low - Asserted
Lower Non-Critical - Going Low - Deasserted
Lower Critical - Going Low - Deasserted
Lower Critical - Going Low - Asserted
Lower Non-Critical - Going Low - Asserted
Lower Non-Critical - Going Low - Deasserted
Lower Critical - Going Low - Deasserted
Lower Critical - Going Low - Asserted

Save Event Logs

Clear All Event Logs

ID	Type	TimeStamp	GenID (Low)	GenID (High)	EvMRev	Sensor Type	Sensor #	EvtDir	Event Data1	Event Data2	Event Data3
0018h	02h	53200807h	20h	00h	04h	02h	0dh	81h	50h	75h	74h
0017h	02h	53200807h	20h	00h	04h	02h	0dh	81h	52h	75h	70h
0016h	02h	53200802h	20h	00h	04h	02h	0dh	01h	52h	6eh	70h
0015h	02h	53200801h	20h	00h	04h	02h	0dh	01h	50h	71h	74h
0014h	02h	532007f6h	20h	00h	04h	02h	17h	81h	50h	79h	74h
0013h	02h	532007f6h	20h	00h	04h	02h	17h	81h	52h	79h	70h
0012h	02h	532007e1h	20h	00h	04h	02h	17h	01h	52h	6eh	70h
0011h	02h	532007e0h	20h	00h	04h	02h	17h	01h	50h	71h	74h
0010h	02h	532007d7h	20h	00h	04h	02h	21h	81h	50h	79h	74h
000fh	02h	532007d6h	20h	00h	04h	02h	21h	81h	52h	73h	70h
000eh	02h	532007beh	20h	00h	04h	02h	21h	01h	52h	6fh	70h
000dh	02h	532007bdh	20h	00h	04h	02h	21h	01h	50h	72h	74h
000ch	02h	532007b6h	20h	00h	04h	02h	2bh	81h	50h	79h	74h
000bh	02h	532007b6h	20h	00h	04h	02h	2bh	81h	52h	79h	70h
000ah	02h	532007aeh	20h	00h	04h	02h	2bh	01h	52h	6fh	70h
0009h	02h	532007adh	20h	00h	04h	02h	2bh	01h	50h	73h	74h
0008h	02h	5320079ch	20h	00h	04h	02h	35h	81h	50h	79h	74h
0007h	02h	5320079ch	20h	00h	04h	02h	35h	81h	52h	79h	70h
0006h	02h	53200788h	20h	00h	04h	02h	35h	01h	52h	70h	70h
0005h	02h	53200787h	20h	00h	04h	02h	35h	01h	50h	74h	74h
0004h	02h	53200751h	20h	00h	04h	02h	3fh	01h	50h	7ah	74h
0003h	02h	53200751h	20h	00h	04h	02h	3fh	81h	52h	7ah	70h
0002h	02h	5320074eh	20h	00h	04h	02h	3fh	01h	52h	70h	70h
0001h	02h	5320074dh	20h	00h	04h	02h	3fh	01h	50h	73h	74h

Click on **Clear All Event Logs** to clear all the logs.

Dashboard
PSU Status
Configuration
Firmware Update
HELP

Event Log

Events generated by the system will be logged here. Double-click on a record to see the description.

All Events
filter by: All Sensors
Event Log: 24 event entries, 1 page(s)

☒ BMC Timezone
☐ Client Timezone
UTC Offset: (GMT+/-0)

Event ID	Time Stamp	Sensor Name	Sensor Type	Description
24	03/12/2014 07:08:55	PSU1_VoltageOut	Voltage	Lower Non-Critical - Going Low - Deasserted
23	03/12/2014 07:08:55	PSU1_VoltageOut	Voltage	Lower Critical - Going Low - Deasserted
22	03/12/2014 07:08:50	PSU1_VoltageOut	Voltage	Lower Critical - Going Low - Asserted
21	03/12/2014 07:08:49	PSU1_VoltageOut	Voltage	Lower Non-Critical - Going Low - Asserted
20	03/12/2014 07:08:38	PSU2_VoltageOut	Voltage	Lower Non-Critical - Going Low - Deasserted
19	03/12/2014 07:08:38	PSU2_VoltageOut	Voltage	Lower Critical - Going Low - Deasserted
18	03/12/2014 07:08:17	PSU2_VoltageOut	Voltage	Lower Critical - Going Low - Asserted
17	03/12/2014 07:08:16	PSU2_VoltageOut	Voltage	Lower Non-Critical - Going Low - Asserted
16	03/12/2014 07:08:07	PSU3_VoltageOut	Voltage	Lower Non-Critical - Going Low - Deasserted
15	03/12/2014 07:08:06	PSU3_VoltageOut	Voltage	Lower Critical - Going Low - Deasserted
14	03/12/2014 07:07:42	PSU3_VoltageOut	Voltage	Lower Critical - Going Low - Asserted
13	03/12/2014 07:07:41	PSU3_VoltageOut	Voltage	Lower Non-Critical - Going Low - Asserted
12	03/12/2014 07:07:34	PSU4_VoltageOut	Voltage	Lower Non-Critical - Going Low - Deasserted

Save Event Logs
Clear All Event Logs

Dashboard
PSU Status
Configuration
Firmware Update
HELP

Event Log

Events generated by the system will be logged here. Double-click on a record to see the description.

All Events
filter by: All Sensors
Event Log: 0 event entries

☒ BMC Timezone
☐ Client Timezone
UTC Offset: (GMT+/-0)

Event ID	Time Stamp	Sensor Name	Sensor Type	Description
There are no event log entries present at this time.				

Save Event Logs
Clear All Event Logs

5. Configuration

To open this page, click on **Configuration** on the main menu.

Configuration allows you to configure settings such as **Network**, **NTP**, **PEF**, **Users** and **LDAP/E-Directory**.

Dashboard	PSU Status	Configuration	Firmware Update
Network Settings		<div> <div> Network NTP PEF Users LDAP/E-Directory </div> </div>	
Manage network settings of the		<div> <div>eth0</div> </div>	
LAN Interface		<div> <input checked="" type="checkbox"/> Enable </div>	
LAN Settings			
MAC Address		<div> F8:0F:41:7D:78:28 </div>	
IPv4 Configuration			
Obtain an IP address automatically		<div> <input checked="" type="checkbox"/> Use DHCP </div>	
IPv4 Address		<div> 172.17.146.50 </div>	
Subnet Mask		<div> 255.255.0.0 </div>	
Default Gateway		<div> 172.17.1.254 </div>	

5.1 Network

To open this page, click on **Configuration** → **Network**.

Network Settings page is used to configure the network settings for the available LAN channels.

There are various network settings in this page. You may adjust IPv4, IPv6 and VLAN Configuration.

Dashboard	PSU Status	Configuration	Firmware Update	HE
Network Settings				
Manage network settings of the device.				
LAN Interface	eth0 ▼			
LAN Settings	<input checked="" type="checkbox"/> Enable			
MAC Address	F8:0F:41:7D:78:28			
IPv4 Configuration				
Obtain an IP address automatically	<input checked="" type="checkbox"/> Use DHCP			
IPv4 Address	172.17.146.50			
Subnet Mask	255.255.0.0			
Default Gateway	172.17.1.254			
IPv6 Configuration				
IPv6 Settings	<input checked="" type="checkbox"/> Enable			
Obtain an IP address automatically	<input checked="" type="checkbox"/> Use DHCP			
IPv6 Address	::			
Subnet Prefix length	0			
Default Gateway	::			
VLAN Configuration				
VLAN Settings	<input type="checkbox"/> Enable			
VLAN ID	0			
VLAN Priority	0			
<div>Save Reset</div>				

5.2 NTP

To open this page, click on **Configuration** → **NTP**.

Network Time Protocol (NTP) is a protocol for synchronizing the clocks of computer systems over packet-switched, variable-latency data networks. This page displays the current date and time settings of the device. It can be used to configure either Date & Time or NTP server settings for the device.

A sample screenshot of NTP Settings Page is shown below.

Dashboard	PSU Status	Configuration	Firmware Update	HELP
-----------	------------	---------------	-----------------	------

NTP Settings

Here you can either configure the NTP server or view and modify the device's Date & Time settings.

Date:

Time:
(hh:mm:ss)

UTC Timezone: Hour(s)

NTP Server:

☒ Automatically synchronize Date & Time with NTP Server

5.3 PEF

To open this page, click on **Configuration -> PEF**.

Platform Event Filtering (PEF) provides a mechanism for configuring the BMC to take selected actions on event messages that it receives or has internally generated. A platform event is defined as an event that originated directly from platform firmware (BIOS) or platform hardware (ASIC, chip set or microcontroller) independently from the state of the operating system or system management hardware.

Use this page to configure **Event Filter**, **Alert Policy** and **LAN Destination**.

To delete or modify an entry, select an entry in the list and click on **Delete** or **Modify**. To add a new entry, select a blank slot and click on **Add**.

To open the **PEF Management** page, click on **Configurations>PEF** from the main menu. A sample screenshot of **PEF Management** page is shown below.

Dashboard
PSU Status
Configuration
Firmware Update
HELP

PEF Management

Use this page to configure Event Filter, Alert Policy and LAN Destination. To delete or modify an entry, select it in the list and click "Delete" or "Modify". To add a new entry, select an unconfigured slot and click "Add".

Event Filter
Alert Policy
LAN Destination

Configured Event Filter count: 15

PEF ID	Filter Configuration	Event Filter Action	Event Severity	Sensor Name
1	Enabled	[Alert]	Unspecified	Any
2	Enabled	[Alert]	Unspecified	Any
3	Enabled	[Alert]	Unspecified	Any
4	Enabled	[Alert]	Unspecified	Any
5	Enabled	[Alert]	Unspecified	Any
6	Enabled	[Alert]	Unspecified	Any
7	Enabled	[Alert]	Unspecified	Any
8	Enabled	[Alert]	Unspecified	Any
9	Enabled	[Alert]	Unspecified	Any
10	Enabled	[Alert]	Unspecified	Any
11	Enabled	[Alert]	Unspecified	Any

Add
Modify
Delete

Use this page to modify the existing **Event Filter** entry. Click on **Modify** to accept the modification.

Modify Event Filter entry

Event Filter Configuration

PEF ID

3

Filter Configuration

☒ Enable

Event Severity

Unspecified

Filter Action configuration

Event Filter Action

☒ Alert

Power Action

None

Alert Policy Number

3

Generator ID configuration

Generator ID Data

☒ Raw Data

Generator ID 1

0xFF

Generator ID 2

0xFF

Event Generator

☐ Slave type
☐ Software type

Slave Address/Software ID

Channel Number

0

IPMB Device LUN

1

Sensor configuration

Sensor Type

All Sensors

Sensor Name

All Sensors

Event Options

All Events

Event Data configuration

Event Trigger

255

Event Data 1 AND Mask

0

Event Data 1 Compare 1

0

Event Data 1 Compare 2

0

Event Data 2 configuration

Event Data 2 AND Mask

0

Event Data 2 Compare 1

0

Event Data 2 Compare 2

0

Event Data 3 configuration

Event Data 3 AND Mask

0

Event Data 3 Compare 1

0

Event Data 3 Compare 2

0

Modify

Cancel

Event Filter Configuration

Event Severity defines the severity of the event.

Event Severity	Unspecified ▼
Filter Action configuration	Unspecified
Event Filter Action	Monitor
Power Action	Information
Alert Policy Number	Normal
	Non-Critical
	Critical
	Non-Recoverable

Power Action defines the action of the power supply.

Power Action	None ▼
Alert Policy Number	None
Generator ID configuration	Power Down
Generator ID Data	Power Reset
	Power Cycle
	<input checked="" type="checkbox"/> Raw Data

Sensor Type is one of the most important factors in your configuration. Any unusual data in the selected sensors will trigger the **Event Filter Action**.

Sensor Type	All Sensors ▼
Sensor Name	All Sensors
Event Options	Temperature Sensors
	Voltage Sensors
	Current Sensors
	Fan Sensors
	Power Supply
Event Data configuration	Power Unit

Sensor Name varies according to the selected Sensor Type.

Choose **Temperature Sensors** as the Sensor Type and the Sensor Name drop-down list appears as shown.

Sensor Name	All Sensors
Event Options	All Sensors
Event Data configuration	Board_12V
Event Trigger	Board_3.3V
Event Data 1 AND Mask	Board_Temp
Event Data 1 Compare 1	TotalPowerOut
Event Data 1 Compare 2	TotalPowerIn
Event Data 2 configuration	PSU1_Status
Event Data 2 AND Mask	PSU1_CurrentOut
	PSU1_VoltageOut
	PSU1_PowerOut
	PSU1_CurrentIn
	PSU1_VoltageIn
	PSU1_PowerIn
	PSU1_FanSpeed
	PSU1_Temp
	PSU2_Status
	PSU2_CurrentOut

Choose **PSU1_Temp** as the Sensor Name and the Event Options drop-down list appears as shown.

Sensor Type	All Sensors
Sensor Name	PSU1_Temp
Event Options	All Events
	All Events
	Sensor Events

This screen displays the **Temperature Sensors** drop-down list.

Sensor Type	Temperature Sensors ▼
Sensor Name	All Sensors ▼
Event Options	All Sensors
	Board_Temp
	PSU1_Temp
	PSU2_Temp
	PSU3_Temp
	PSU4_Temp
	PSU5_Temp
	PSU6_Temp
Event Data configuration	
Event Trigger	
Event Data 1 AND Mask	

This screen displays the **Voltage Sensors** drop-down list.

Sensor Type	Voltage Sensors ▼
Sensor Name	All Sensors ▼
Event Options	All Sensors
	Board_12V
	Board_3.3V
	PSU1_VoltageOut
	PSU1_VoltageIn
	PSU2_VoltageOut
	PSU2_VoltageIn
	PSU3_VoltageOut
	PSU3_VoltageIn
	PSU4_VoltageOut
	PSU4_VoltageIn
	PSU5_VoltageOut
	PSU5_VoltageIn
	PSU6_VoltageOut
	PSU6_VoltageIn
Event Data configuration	
Event Trigger	
Event Data 1 AND Mask	
Event Data 1 Compare 1	
Event Data 1 Compare 2	
Event Data 2 configuration	
Event Data 2 AND Mask	

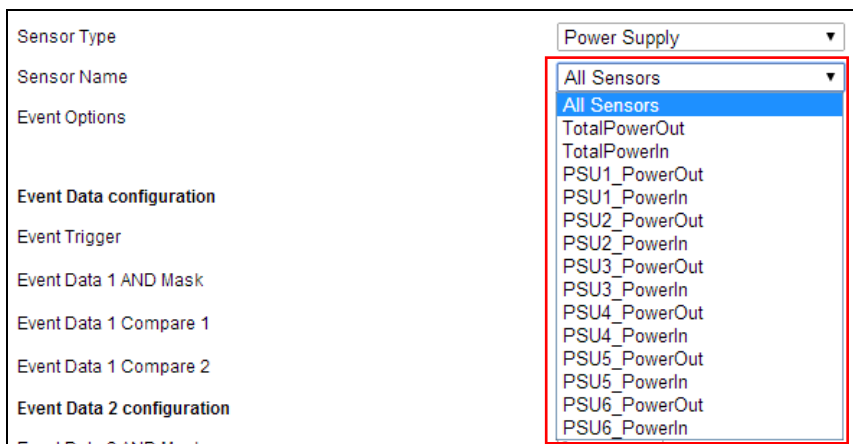
This screen displays the **Current Sensors** drop-down list.

Sensor Type	Current Sensors ▼
Sensor Name	All Sensors ▼
Event Options	All Sensors
Event Data configuration	PSU1_CurrentOut
Event Trigger	PSU1_CurrentIn
Event Data 1 AND Mask	PSU2_CurrentOut
Event Data 1 Compare 1	PSU2_CurrentIn
Event Data 1 Compare 2	PSU3_CurrentOut
	PSU3_CurrentIn
	PSU4_CurrentOut
	PSU4_CurrentIn
	PSU5_CurrentOut
	PSU5_CurrentIn
	PSU6_CurrentOut
	PSU6_CurrentIn

This screen displays the **Fan Sensors** drop-down list.

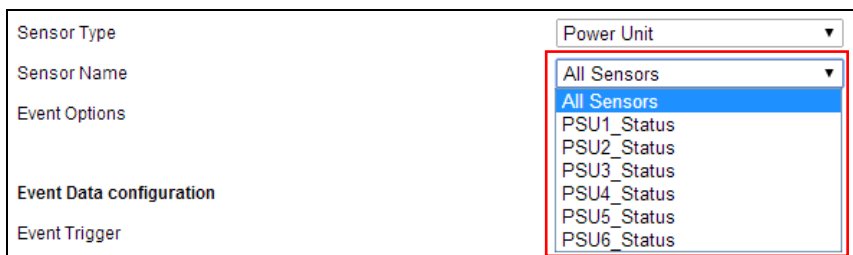
Sensor Type	Fan Sensors ▼
Sensor Name	All Sensors ▼
Event Options	All Sensors
Event Data configuration	PSU1_FanSpeed
Event Trigger	PSU2_FanSpeed
	PSU3_FanSpeed
	PSU4_FanSpeed
	PSU5_FanSpeed
	PSU6_FanSpeed

This screen displays the **Power Supply** drop-down list.



The screenshot shows a configuration interface for a Power Supply. On the left, there are labels for 'Sensor Type', 'Sensor Name', 'Event Options', 'Event Data configuration', 'Event Trigger', 'Event Data 1 AND Mask', 'Event Data 1 Compare 1', 'Event Data 1 Compare 2', 'Event Data 2 configuration', and 'Event Data 2 AND Mask'. On the right, a drop-down menu is open, showing a list of options. The top of the menu is labeled 'Power Supply'. The list includes 'All Sensors' (highlighted in blue), 'TotalPowerOut', 'TotalPowerIn', 'PSU1_PowerOut', 'PSU1_PowerIn', 'PSU2_PowerOut', 'PSU2_PowerIn', 'PSU3_PowerOut', 'PSU3_PowerIn', 'PSU4_PowerOut', 'PSU4_PowerIn', 'PSU5_PowerOut', 'PSU5_PowerIn', 'PSU6_PowerOut', and 'PSU6_PowerIn'. A red rectangle highlights the entire drop-down menu area.

This screen displays the **Power Unit** drop-down list.



The screenshot shows a configuration interface for a Power Unit. On the left, there are labels for 'Sensor Type', 'Sensor Name', 'Event Options', 'Event Data configuration', and 'Event Trigger'. On the right, a drop-down menu is open, showing a list of options. The top of the menu is labeled 'Power Unit'. The list includes 'All Sensors' (highlighted in blue), 'PSU1_Status', 'PSU2_Status', 'PSU3_Status', 'PSU4_Status', 'PSU5_Status', and 'PSU6_Status'. A red rectangle highlights the entire drop-down menu area.

After all the settings are configured, click on **Modify** or **Cancel** to return to the PEF main page.

5.4 Users

To open this page, click on **Configuration** → **Users**.

The list below shows the current list of available local users. To delete or modify a user, select the user name from the list and click on **Delete User** or **Modify User**. To add a new user, select a blank slot and click on **Add User**.

Dashboard	PSU Status	Configuration	Firmware Update	HELP
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Manage Local User

The list below shows the current list of available local users. To delete or modify a user, select the user name from the list and click "Delete User" or "Modify User". To add a new user, select an unconfigured slot and click "Add User".

Number of configured users: 3

UserID	Username	User Access	Network Privilege	SNMP Status	Email ID
1	anonymous	Disabled	Administrator	Disabled	~
2	admin	Enabled	Administrator	Disabled	~
3	user	Disabled	User	Disabled	~
4	~	~	~	~	~
5	~	~	~	~	~
6	~	~	~	~	~
7	~	~	~	~	~
8	~	~	~	~	~
9	~	~	~	~	~
10	~	~	~	~	~

Modify User

Username

anonymous

☐ Change Password

Password Size

☒ 16 Bytes
 ☐ 20 Bytes

Password

Confirm Password

User Access

☐ Enable

Network Privilege

Administrator

SNMP Status

☐ Enable

SNMP Access

Read Only

Authentication Protocol

SHA

Privacy Protocol

DES

Email ID

Email Format

AMI-Format

Uploaded SSH Key

Not Available

New SSH Key

No file chosen

Modify

Cancel

5.5 LDAP/E-Directory Settings

Lightweight Directory Access Protocol (LDAP) is an industry standard application protocol for accessing and maintaining distributed directory information services over an IP network.

To open this page, click on **Configuration -> LDAP/E-Directory Settings**.

LDAP/E-Directory Settings is currently disabled. To enable the LDAP/E-Directory and configure its settings, click on **Configuration -> LDAP/E-Directory Settings -> Advanced Settings** and select **Enable**.



The screenshot shows a dialog box titled "Advanced LDAP/E-Directory Settings". It contains the following fields and controls:

- LDAP/E-Directory Authentication:** A checkbox labeled "Enable" which is checked.
- Server Address:** A text box containing "172.17.144.110".
- Port:** A text box containing "389".
- Bind DN:** A text box containing "o=example,c=example,ou=org".
- Password:** A text box filled with ten asterisks "*****".
- Search Base:** A text box containing "o=example,c=example,ou=org".
- Buttons:** "Save" and "Cancel" buttons are located at the bottom right.

The list below shows the current list of configured Role Groups. To delete or modify a Role Group, select the name in the list and click on **Delete Role Group** or **Modify Role Group**. To add a new Role Group, select a blank slot and click on **Add Role Group**.

Dashboard
PSU Status
Configuration
Firmware Update
HELP

LDAP/E-Directory Settings

LDAP/E-Directory is currently disabled. To enable LDAP/E-Directory and configure its settings. Click on 'Advanced Settings' button.

Advanced Settings

The list below shows the current list of configured Role Groups. If you would like to delete or modify a role group, select the name in the list and click Delete Role Group or Modify Role Group. To add a new Role Group, select an unconfigured slot and click Add Role Group.

Number of configured Role groups: 0

Role Group ID ↗	Group Name ↗	Group Search Base ↗	Group Privilege ↗
1	~	~	~
2	~	~	~
3	~	~	~
4	~	~	~
5	~	~	~

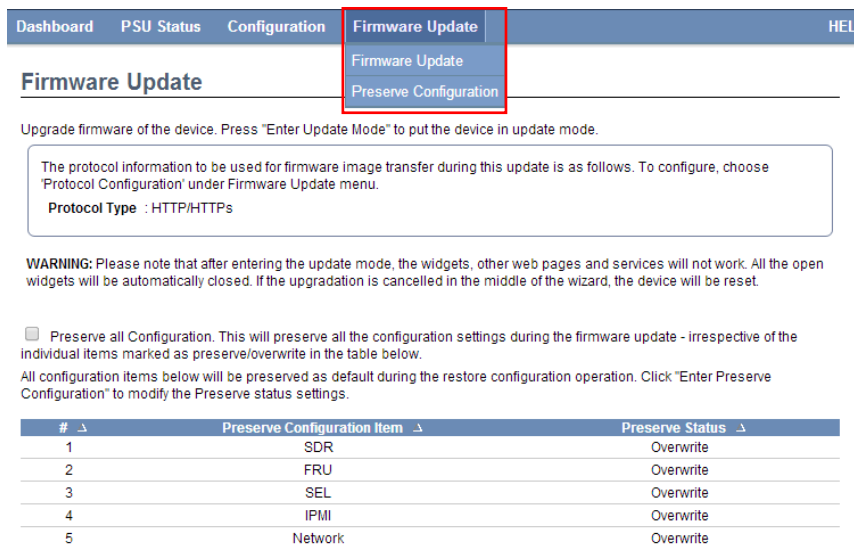
Add Role Group
Modify Role Group
Delete Role Group

6. Firmware Update

To open this page, click on **Firmware Update** on the main menu.

Firmware Update options are **Firmware Update** and **Preserve Configuration**.

The following is a sample Firmware Update screen.



Dashboard PSU Status Configuration **Firmware Update** HEL

Firmware Update

Upgrade firmware of the device. Press "Enter Update Mode" to put the device in update mode.

The protocol information to be used for firmware image transfer during this update is as follows. To configure, choose 'Protocol Configuration' under Firmware Update menu.

Protocol Type : HTTP/HTTPs

WARNING: Please note that after entering the update mode, the widgets, other web pages and services will not work. All the open widgets will be automatically closed. If the upgradation is cancelled in the middle of the wizard, the device will be reset.

☐ Preserve all Configuration. This will preserve all the configuration settings during the firmware update - irrespective of the individual items marked as preserve/overwrite in the table below.

All configuration items below will be preserved as default during the restore configuration operation. Click "Enter Preserve Configuration" to modify the Preserve status settings.

# ↘	Preserve Configuration Item ↘	Preserve Status ↘
1	SDR	Overwrite
2	FRU	Overwrite
3	SEL	Overwrite
4	IPMI	Overwrite
5	Network	Overwrite

6.1 Firmware Update

To open this page, click on **Firmware Update** → **Firmware Update**.

Firmware Update allows you to configure and update the firmware.

To start updating the device firmware, click on **Enter Update Mode**.

Dashboard
PSU Status
Configuration
Firmware Update
HELP

Firmware Update

Upgrade firmware of the device. Press "Enter Update Mode" to put the device in update mode.

The protocol information to be used for firmware image transfer during this update is as follows. To configure, choose 'Protocol Configuration' under Firmware Update menu.
Protocol Type : HTTP/HTTPS

WARNING: Please note that after entering the update mode, the widgets, other web pages and services will not work. All the open widgets will be automatically closed. If the upgradation is cancelled in the middle of the wizard, the device will be reset.

☒ Preserve all Configuration. This will preserve all the configuration settings during the firmware update - irrespective of the individual items marked as preserve/overwrite in the table below.
 All configuration items below will be preserved as default during the restore configuration operation. Click "Enter Preserve Configuration" to modify the Preserve status settings.

#	Preserve Configuration Item	Preserve Status
1	SDR	Overwrite
2	FRU	Overwrite
3	SEL	Overwrite
4	IPMI	Overwrite
5	Network	Overwrite
6	NTP	Overwrite
7	SSH	Overwrite
8	KVM	Overwrite
9	Authentication	Overwrite

Enter Preserve Configuration
Enter Update Mode


Upload firmware image file:

Firmware Update

Upgrade firmware of the device. Press "Enter Update Mode" to put the device in update mode.

The protocol information to be used for firmware image transfer during this update is as follows. To configure, choose 'Protocol Configuration' under Firmware Update menu.
Protocol Type : HTTP/HTTPS

WARNING: Please note that after entering the update mode, the widgets, other web pages and services will not work. All the open widgets will be automatically closed. If the upgradation is cancelled in the middle of the wizard, the device will be reset.

☒ Closing all active client requests.
☒ Preparing device for firmware upgrade.
☐ Uploading firmware image. 
☐ Verifying firmware image.
☐ Flashing firmware image.
☐ Resetting Device.

Upload Firmware

Please select the firmware image to flash

Choose File
No file

Upload
Cancel

Section Based Firmware Update allows the user to configure the firmware image for section-based flashing.

☒ Closing all active client requests.
☒ Preparing device for firmware upgrade.
☒ Uploading firmware image.
☐ Verifying firmware image. ↻
☐ Flashing firmware image.
☐ Resetting Device.

Section Based Firmware Update

The following section is used to allow the user to configure the firmware image for section based flashing.

☐ Check this option to do full firmware flash

#	Section Name	Existing Version	Uploaded Version	Upgradable/Non-Upgradable
1	boot	1.7.00	1.7.00	<input type="checkbox"/>
2	bakupconf	1.7.00	1.7.00	<input type="checkbox"/>
3	root	1.7.00	1.7.00	<input type="checkbox"/>
4	osimage	1.7.00	1.7.00	<input type="checkbox"/>
5	www	1.7.00	1.7.00	<input type="checkbox"/>
6	lmedia	1.7.00	1.7.00	<input type="checkbox"/>
7	ast2300e	1.8.00	1.8.00	<input type="checkbox"/>

Proceed Cancel

Finally, the device will be reset.

Firmware Update

Upgrade firmware of the device. Press "Enter Update Mode" to put the device in update mode.

The protocol info choose "Protocol Type"

Protocol Type

WARNING: Please All the open widget will be reset.

Device has been reset

The device has been reset. Please close this browser session and open a new browser session to reconnect to the device.

The device may take about a minute to boot up.

☒ Closing all active client requests.
☒ Preparing device for firmware upgrade.
☒ Uploading firmware image.
☒ Verifying firmware image.
☒ Flashing firmware image. (100% done)
☒ Resetting Device.

6.2 Preserve Configuration

To open this page, click on **Firmware Update** → **Preserve Configuration**.

All configuration items below will be preserved by default during a restore factory default operation. Click on **Enter Preserve Configuration** to modify the **Preserve Status** settings.

Dashboard
PSU Status
Configuration
Firmware Update
HELP

Firmware Update

Upgrade firmware of the device. Press "Enter Update Mode" to put the device in update mode.

The protocol information to be used for firmware image transfer during this update is as follows. To configure, choose 'Protocol Configuration' under Firmware Update menu.

Protocol Type : HTTP/HTTPS

WARNING: Please note that after entering the update mode, the widgets , other web pages and services will not work. All the open widgets will be automatically closed. If the upgradation is cancelled in the middle of the wizard, the device will be reset.

☐ Preserve all Configuration. This will preserve all the configuration settings during the firmware update - irrespective of the individual items marked as preserve/overwrite in the table below.
All configuration items below will be preserved as default during the restore configuration operation. Click "Enter Preserve Configuration" to modify the Preserve status settings.

#	Preserve Configuration Item	Preserve Status
1	SDR	Overwrite
2	FRU	Overwrite
3	SEL	Overwrite
4	IPMI	Overwrite
5	Network	Overwrite
6	NTP	Overwrite
7	SSH	Overwrite
8	KVM	Overwrite
9	Authentication	Overwrite

Enter Preserve Configuration
Enter Update Mode

This page allows you to select specific configuration items to be preserved in the cases of Restore Configuration and Firmware Update without the Preserve Configuration option.

Select the configuration items to be preserved and click on **Save**. Finally select **Firmware Update** or **Restore Configuration** and preserve the selected configuration items.

Preserve Configuration

This page allows you to select the specific configuration items to be preserved in the cases of "Restore Configuration", and "Firmware Update without Preserve Configuration option".

Click here to go to [Firmware Update](#) or [Restore Configuration](#)

Number of Preserved Items: 0

#	Preserve Configuration Item	Preserve Status
1	SDR	<input type="checkbox"/>
2	FRU	<input type="checkbox"/>
3	SEL	<input type="checkbox"/>
4	IPMI	<input type="checkbox"/>
5	Network	<input type="checkbox"/>
6	NTP	<input type="checkbox"/>
7	SSH	<input type="checkbox"/>
8	KVM	<input type="checkbox"/>
9	Authentication	<input type="checkbox"/>

Check All

Uncheck All

Save

Reset